IN THE CLAIMS:

Please **amend claims 1, 6, 8, and 10-12,** and **add claims 13-20** as follows:

1. *(Currently amended)* A colour sensor having a plurality of LEDs, the LEDs being arranged to function as photosensitive devices having differing and adjacent overlapping spectral responses and a switching arrangement arranged to respond to an electrical output of each LED separately in response to the LEDs having optical energy incident thereon.

2. *(Previously presented)* A colour sensor according to claim **1,** wherein each of the LEDs has a light responsive face, the faces being oriented at different angles relative to a sample to be sensed.

3. *(Previously presented)* A colour sensor according to claim **1,** wherein a subset of the LEDs is arranged to illuminate a sample to be sensed and at least one of the remaining LEDs is arranged to sense light reflected from the sample.

4. *(Previously presented)* A colour sensor according to claim **3,** wherein each of the LEDs has a light responsive face, the faces being oriented at different angles relative to the sample to be sensed.

5. *(Previously presented)* A colour sensor according to claim **4**, including a switching arrangement arranged to activate the LEDs into a light emitting state in a predetermined sequence and to switch the electrical outputs of the LEDs that are not activated into the light emitting state so the LEDs that are not activated into the light emitting state are arranged to be able to supply the electric signals to an output of the sensor in a predetermined sequence, the LEDs having detecting faces at differing angles, the differing angles of the detecting faces of the LEDs being arranged to produce a plurality of combinations of light that is directed to be incident on and sensed as light reflected from a sample to be sensed.

6. *(Currently amended)* A colour sensor having a plurality of LEDs having differing and adjacent overlapping spectral characteristics, each of the LEDS being arranged to illuminate a sample to be sensed, from at least two different angles, the sensor further including LEDs arranged to sense light reflected from the sample and supply electric signals determined by the light incident on the LEDs to an output of the sensor.

7. *(Previously presented)* A colour sensor according to claim **6**, including a switching arrangement arranged to activate the LEDs into a light emitting state in a predetermined sequence and to switch the electrical outputs of the LEDs that are not activated into the light

emitting state so the LEDs that are not activated into the light emitting state are arranged to be able to supply the electric signals to an output of the sensor in a predetermined sequence, the LEDs having detecting faces and differing angles whereby differing angles of the detecting faces of the LEDs are arranged to produce a plurality of combinations of light that is directed to be incident on and sensed as light reflected from a sample to be sensed.

8. *(Currently amended)* A colour sensor comprising a plurality of LEDs arranged to ~~provide~~ emit differing and adjacent overlapping spectral light emissions and each oriented to receive reflected light from a predetermined sensing location, the LEDS being arranged to supply an electric signal to an output of the sensor in response to the reflected light from the sensing location being incident on the LED.

9. *(Previously presented)* A sensor according to claim **8**, wherein each LED has a face oriented to direct emitted light at the predetermined sensing location and the sensor further includes a switching arrangement arranged to switch the LEDs to activate predetermined sets of the LEDs to emit light and to direct the electrical outputs of the non-activated LEDs to the sensor output.

10. *(Currently amended)* A method of sensing colour comprising illuminating a sample to be sensed and causing ~~at least one LED~~ plural LEDs to (a) separately and respectively receive and respond to

reflected light in different and adjacent overlapping spectral bands resulting from the sample being illuminated during the illuminating ~~steps~~ step and (b) derive [[an]] electrical ~~output~~ outputs in response to the ~~LED~~ LEDs receiving and responding to the reflected light.

11. *(Currently amended)* A method according to claim **10**, including illuminating the sample with optical energy in different and adjacent overlapping spectral bands by using ~~at least one of~~ the plural LEDs, switching the plural LEDs to a light emitting state in a predetermined sequence and switching the electrical outputs of the ~~non-activated~~ LEDs that are not switched to the light of emitting state to an output of the sensor in a predetermined sequence, the LEDs having emitting faces at differing angles, and causing the differing angles of the faces of the LEDs to produce a plurality of combinations of light (a) incident on and (b) sensed as light reflected from a sample to be sensed.

12. *(Currently amended)* A method according to claim **10**, wherein the ~~LED has an emission band~~ LEDs have differing and overlapping spatial emission bands and further including deriving an indication of the light energy reflected from the sample in the LED emission band by responding to the electrical output derived by the LED.

13. *(New)* A method according to claim **8**, wherein the LEDS have differing and adjacent overlapping spectral light detection characteristics.

14. (*New*) A colour sensor according to claim **1**, wherein at least four of the LEDs are included, a multiplexer connected to be responsive to signals derived by the LEDs for sequentially supplying the signals derived by the LEDs to a single lead coupled to a processing module.

15. (*New*) A colour sensor according to claim **6**, wherein at least four of the LEDs are included, a multiplexer connected to be responsive to signals derived by the LEDs for sequentially supplying the signals derived by the LEDs to a single lead coupled to a processing module, and a de-multiplexer for sequentially supplying energizing voltages to the LEDs for causing the LEDs to sequentially emit the optical radiation with the differing and overlapping spectral characteristics.

16. (*New*) A colour sensor according to claim **1**, further including a temperature sensor and a processor responsive to the temperature sensor and the outputs of the LEDs for carrying out temperature compensation of the LEDs.

17. (*New*) A colour sensor according to claim **10**, further comprising detecting the quantity of light emitted by the sample in N different spectral bands by solving M simultaneous equations (where M is at least equal to N) having variables determined by the quantity of light emitted by P illuminating sources and the quantity of light detected by Q of the LEDs, where M=PxQ.

18. (*New*) A colour sensor according to claim **1**, further comprising a processor for detecting the quantity of light emitted by the sample in N different spectral bands by solving M simultaneous equations (where M is at least equal to N) having variable determined by the quantity of light emitted by P illuminating sources and the quantity of light detected by Q of the LEDs, where M=PxQ.

19. (*New*) A colour sensor according to claim **6**, further comprising a processor for detecting the quantity of light emitted by the sample in N different spectral bands by solving M simultaneous equations (where M is at least equal to N) having variable determined by the quantity of light emitted by P illuminating LEDs and the quantity of light detected by Q of the LEDs, where M=PxQ.

20. (*New*) A colour sensor according to claim **8**, further comprising a processor for detecting the quantity of light emitted by the sample in N different spectral bands by solving M simultaneous equations (where M is at least equal to N) having variable determined by the quantity of light emitted by P emitting LEDs and the quantity of light detected by Q of the LEDs, where M=PxQ.